

Knowledge and Prevalence of Emergency Contraceptive Pills among the General Population Visiting a Tertiary Care Centre

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ABSTRACT

Introduction: Emergency contraception is a contraceptive method used to prevent unwanted pregnancy in the first few days after unprotected sexual intercourse or contraceptive failure/accident. Many women are unaware of the existence of emergency contraception, misunderstand its use and safety, or do not use it when needed. Especially, residents of the rural regions of Nepal are deprived of family planning services and measures, which cover a major percent of our hospital patients. **Aims:** To assess the knowledge regarding emergency contraceptive pills, family planning and their prevalence. **Methods:** A descriptive cross-sectional study with a population size of 392 was performed at Nepalgunj medical college teaching hospital, Kohalpur, starting from January to April 2022. A pre-tested questionnaire containing structural, semi-structural, and open-ended questions in printed form was made as a data collection tool. All the people in this study were interviewed after receiving their consent. **Results:** 363 out of 392(92.6%) people in our study have known about contraceptives. Only 74.93% responded to having used some sort of contraceptive measure. Oral contraceptive pills were found to be the most used measure in 265 (73%). 222(61.6%) of 363 have heard about emergency contraceptive pills but only 71(31.98%) of them have ever used them. Out of 222 respondents who were aware of emergency contraceptive pills, only 129(58.10%) correctly identified 72 hours as the time limit for the methods to be used. Nineteen respondents (8.56%) believed that emergency contraceptive pills could be used as regular pills. None of them were aware of the use of the intrauterine contraceptive device as an emergency contraception. **Conclusion:** Despite having knowledge, only two-third population was found using any of the contraceptive measures. Among those having knowledge about emergency contraceptive pills, more than a half people preferred emergency contraceptive pills for any unplanned event. Emergency contraception awareness is essential to prevent unwanted pregnancy.

Keywords: Contraception, Emergency Contraceptive Pills, Family planning, Knowledge

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INTRODUCTION

Unwanted pregnancies are a significant public health concern. From 1 billion people (1800 AD) to 7.9 billion (2021 AD), the world's population has increased.¹ In Nepal, about 19% of pregnancies are unplanned.² With an ascend in population from the last census to 29,192,480 (Census 2021), Nepal has an annual growth rate of 0.93 percent.³ A variety of pregnancy prevention techniques are referred to as contraception. Emergency contraceptive pills (ECP) can prevent up to 95% of unwanted pregnancies if used within 5 days of having intercourse, though their effectiveness wanes

with time.⁴ Hormonal contraceptives that delays or stops ovulation and intrauterine devices containing copper which blocks fertilization are the two possibilities for emergency contraception. According to Nepal Demographic Health Survey (NDHS 2011), 2 percent of births are unintended.⁵ The rate of teenage pregnancies in Nepal is highest in the mid-western area.⁵ The prevalence of family planning, by any method, is (53%), which is still unmet.⁶ Over 250 million pregnancies take place annually, with 33 percent being unplanned.⁷ Yearly, unsafe abortions result into deaths of almost 47,000 women.⁸ In the 15-25 age category, 7 out of 1000 illegal abortions are performed annually.⁹ A situation like this could be made better

by educating the user and raising their level of awareness.¹⁰ ECP is playing a crucial and distinctive role in lowering unintended or unwanted pregnancies.¹¹ According to data, Banke has the highest rate of teen pregnancies. Therefore, this study may bring to light cases like this in our institution.

METHODS

This study was conducted based on a descriptive cross-sectional design, data were collected only once and there was no follow-up done. This study was focused on assessing the knowledge and practice of family planning (FP) and emergency contraceptives (EC) among the general population visiting Nepalgunj Medical College, Kohalpur. Visitors were interviewed using questionnaires having structured and semi-structured also open-ended questions after obtaining informed consent. 392 random visitors were selected as the study population. Collected primary data were later tabulated and analyzed using cross-tabulation and descriptive calculations. The study started on January 2022, validity and reliability of the questionnaire was checked by interviewing 30% of the real population. The Nepali language was used for better response. All the collected information was assessed using MS-EXCEL and SPSS version 25 for descriptive analysis. Analyzed data were thus presented in the form of tables and charts and interpreted accordingly.

RESULTS

Demographic data

The demographic characteristics of the study population (392) are presented in the table below:

Characteristics	Number	%
Age		
10-18	07	1.8
19-25	93	23.7
26-45	259	66.1
46-65	25	6.4
65-70	08	2
Sex		
Male	73	18.6
Female	319	81.4
Marital status		
Married	371	94.6
Unmarried	21	5.4
Educational status		
No school	70	17.8
School	167	42.6
College	143	36.5
Graduate	11	0.3
Postgraduate	11	2.8

Table I: Socio-demographic characteristics of respondents

The majority of respondents in this study consisted of females 319 (81.4%) mostly belonging to the age group 26-45 years 259 (66.1%). More than half i.e. 55.86% had married at the early

age of 10-20 and only 70 (17.8%) had not received any form of formal education.

Characteristics	Number	(%)
Knowledge about contraception		
Yes	363	92.60
No	29	7.40
Methods known		
MODERN MEASURES		
Depo (Sangini)	200	55.09
Pills	265	73
Condom	237	65.29
IUCD (Copper-T)	107	29.47
Norplant	94	25.89
TRADITIONAL MEASURES		
Withdrawal method	4	1.52
Calendar method	7	2.66
Abstinence	13	4.94
PERMANENT METHODS		
Male sterilization	16	6.08
Female sterilization	12	4.56

Table II: Knowledge about contraception

Out of 392 respondents, 363(92.60%) had some knowledge about contraception whereas 29(7.40%) did not know about contraception. Among various methods, Pills (73%), condoms (65.29%) and Depo (55.09%) were the most popular methods.

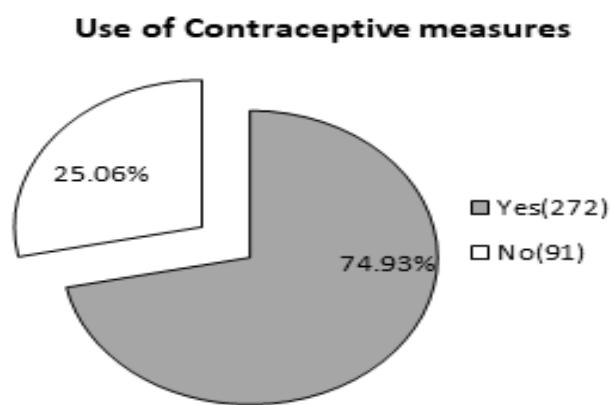


Figure 1: Use of Contraceptive Measures

Pie chart above shows that out of 363 respondents who knew about contraception, 272(74.93%) have used some form of contraceptive measures while the remaining 91(25.06%) have not used them at all.

Characteristics	Number	(%)
Use of contraception		
MODERN MEASURES		
Depo (Sangini)	102	37.50
Pills	99	36.39
Condom	72	26.47
IUCD (Copper-T)	10	3.67
Norplant	29	10.66
TRADITIONAL MEASURES		
Withdrawal method	03	1.10
Calendar method	01	0.36
Abstinence	04	1.47
PERMANENT METHODS		
Male sterilization	02	0.73
Female sterilization	03	1.10
Beginning of use		
Before marriage	30	11.03
Immediately after marriage	77	28.31
After Abortion	04	1.47
After the birth of the first child	161	59.19

Table III: Use of Contraceptive Measures

Among 272 respondents, who have used some form of contraception, it was observed that depo (37.50%), pills (36.39%) and condoms (26.47%) were mostly preferred methods. The use of contraceptive methods started mostly after the birth of the first child in 161 (59.19%).

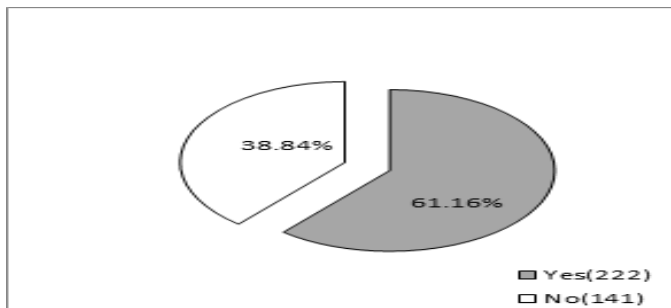


Figure 2: Knowledge regarding Emergency contraceptive pills

The above pie chart shows that out of 363 respondents 222(61.16%) know about ECP while the remaining 141(38.84%) do not know about them.

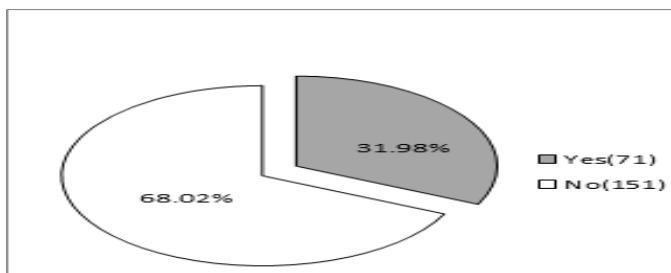


Figure 3: Use of Emergency Contraceptive pills

Pie chart above shows that out of 222 respondents, only 71(31.98%) have used ECP while the remaining 151(68.02%) have not used them yet.

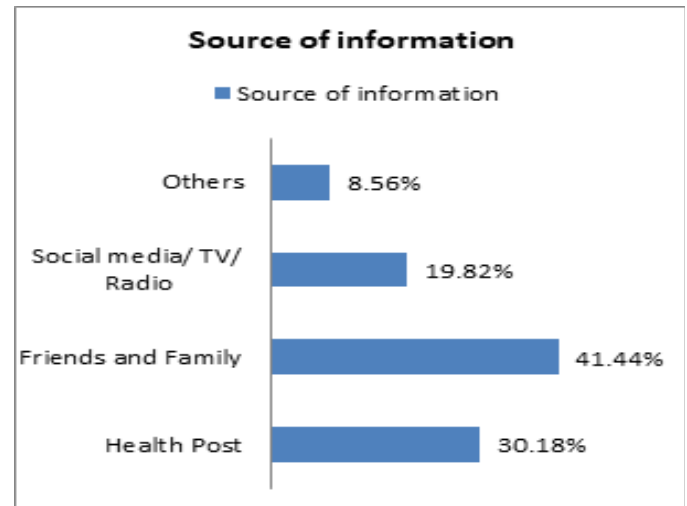


Figure 4: Source of information regarding Emergency Contraception

Friends and family (41.44%) were the major sources of information on ECP followed by the information taken from health posts (30.18%).

Reason	Number	(%)
Unplanned event	41	57.75
Easily available	18	25.35
Only known method	08	11.26
Others	04	5.63

Table IV: Reason for using Emergency Contraceptive pills

The table above shows that the highest number of respondents (57.75%) had answered unplanned events to be the main reason for using ECP.

Character	Number	(%)
Time of intake		
Within 24 hours	48	21.62
Within 72 hours	129	58.10
Don't know	41	18.47
Any time	04	1.80
Can these pills be used as regular contraceptives?		
Yes	19	8.56
No	166	74.7
Don't know	37	16.67

Table V: Knowledge about Emergency Contraceptives

Among the respondents that had some knowledge about EC, 129(58.10%) knew about the correct time of intake i.e. within 72 hours. On being asked if it could be taken as regular contraceptives, 166(74.77%) answered no while 19(8.56%) answered yes.

DISCUSSION

Our study showed maximum awareness regarding contraception i.e. 363(92.6%) respondents out of 392 had some knowledge about it. A study done by H Tuladhar et al also revealed a high percentage of awareness of family planning methods, 93.0% of the respondents knew about at least one method.¹² Another study conducted in Chisapani, Banke (Roy et al, 2018) shows that out of 410 respondents, 393(95.85%) have heard about family planning.¹³

In the present study maximum number of respondents had heard about Pills (73%), condoms (65.28%), and Depo-provera injection (55.09%) respectively. Tanabe et al reported that 76.8% of married women were aware of some sort of modern method.¹⁴ Roy et al, 2018 in their study observed only 277 (70.48%) respondents have used at least one family planning measure among which 54.87% have been using depo, pills (26.71%), condom (32.85%).¹³ While a study by Atuahene et al revealed most (88.2%) used injectables, only 6.1% and 0.9% used implants and IUDs, respectively.¹⁵ Our study revealed that only 2(0.73%) have undergone vasectomy however the research done by Sharma D et al showed that 44% of respondents had already done vasectomy as a permanent method of FP.¹⁶ The findings of the study by (Roy et al, 2018) showed around one-fourth of aware respondents (29.51%) were not using any family planning measure among which 36 non-users (31.03 %) answered that they didn't need to date.¹³ While in our case, 91(25.06%) out of 363 respondents were not using any contraceptives while 30(26.32%) discontinued use due to its related side effects.

Among 363 respondents, 222 (61.16%) of women knew about emergency contraceptives and 38.84% were still unknown. Similar research by (Roy et al, 2018), showed that 174(42.43%) out of 410 knew about ECP.¹³ Meanwhile, another research conducted in Tanahu (Singh et al, 2014) shows that among 100 respondents, 68% had got information about ECP.¹⁷ A similar study conducted at a rural tertiary care hospital in India (Kokane et al, 2012) reported much lower knowledge of EC among women (10.64%).¹⁸ Further research by (Davis et al, 2020) reveals that out of 758 participants, 183(24.1%) had heard about EC.¹⁸ Study conducted by (Bhatta et al, 2019) shows only 2/3rd of the respondent have heard about EC.²⁰

Our research shows, among the respondents who knew about Emergency Contraceptives (222), 31.98 % had used it previously. In a similar study conducted in Chisapani, Banke (Roy et al, 2018) shows that out of 174 respondents, 36(10.68%) have used ECP while the remaining 138(79.31%) have not used it yet.¹³ Relatable study by (Bhatta et al, 2019) reveals only 51.8% of respondents have used EC for the prevention of unintended pregnancy.²⁰ The recommended period for the use of ECP for maximum efficacy is 72 hours. When used within 72 hours of unprotected intercourse, ECP can prevent 75 to 85% of unexpected pregnancies, and this rate declines with time; however recent research has shown that ECPs are effective when taken up to five days after unprotected intercourse.¹⁷ In this study, 58.10% of women out of 222 knew about the

correct recommended time of morning-after pills. A likely study conducted in Chisapani, Banke (Roy et al, 2018) shows that two-third stated it as a 72-hour pill.¹³ Similar study by (Davis et al, 2020) shows that 42.6% of participants opted that EC can be taken within 72 hours of unprotected intercourse.¹⁸ Meanwhile, another research conducted in Tanahu (Singh et al, 2014) shows that out of 100 respondents only 36% of women gave correct answers that it should be used after unprotected sex.¹⁷ Only 28.9% of respondents who had the idea of ECP know about their appropriate timing of use.²⁰

The most common reason reported for the use of emergency contraceptives among the 71 respondents in our study was not using any means of contraception during sexual intercourse (57.75%) followed by easy availability (25.35%). Societal influence was a major factor contributing to women's use of contraceptives for FP.²¹ Nine of the 12 studies found male influence to be the strongest factor in women's decisions to utilize FP services.²² In this research, Friends, and Family (41.44%) were found to be the major source of information regarding ECP which might have resulted to be a major constraint in the dissemination of accurate information on the subject, followed by information from Health posts (30.18%). Again in the study in Chisapani, Banke (Roy et al, 2018), TV/ Radio was found to be the major source.¹³ Whereas study in Tanahu (Singh, et al, 2014) showed the most common source was radio 50%, followed by health workers 38.3%.¹⁷ Another study by H Tuladhar et al stated mass media as the main source of knowledge as reported by more than half (55.5%) of the respondents.¹² Similar study by (Davis et al, 2020) reveals the main source of information was Internet(49.7%).¹⁹ Study by (Bhatta et al, 2019) shows that (52.06%) of the respondents have heard about the emergency contraceptive through classroom education, 20.6% from health workers and pharmacy personnel, 9.9% from television/radio, and 7.4% of them heard about it from their friends.²⁰ However another study shows that 70% of the EC users got information about it from their friends followed by television (30%) and about 27% through the health personnel.¹⁰ Study done by Thapa S mentioned friends as the main source (70%), followed by TV (30%), health personnel (27%), and sexual partners (18%).¹¹ Other studies also show print and electronic media to be the common source of public awareness.¹² In many countries concern about side effects of contraceptives as stated and rumored in the community have contributed to low contraceptive acceptance.²¹

The discrepancy in knowledge and accurate usage of ECP noted in this study can be associated with fluctuating reliability of the source of information provided by peers. ECP are safe, effective and low-cost primary preventive and emergency care intervention, and information about their use should be made available to sexually active populations.²³ Some women do not want to wait until a pregnancy is confirmed, but rather would prefer to have peace of mind right away by taking ECP to eliminate any possibility of a pregnancy.¹¹ Thus dire need of educating women about the correct use of ECP can be noted which can be achieved by spreading accurate information by health professionals.

In thousands of households, hostility towards family planning has its roots in deep rooted customs and beliefs. In Nepal's largely patriarchal culture, it remains the norm for couples to have four or more children: preference for sons means women are forced to go on having children until boys are born. Contraception remains an alien, uncomfortable idea for millions of Nepalese and is tightly controlled by men: women often need consent from their husbands to use contraception.²⁴ Two hundred fourteen million women of reproductive age in developing countries who want to avoid pregnancy are not using a modern contraceptive method. Evidence suggests that women who have more than 4 children are at increased risk of maternal mortality.²⁵

LIMITATIONS

The study would have been even better if conducted over multiple centers to cover a large population. Also there was no follow up. The sensitivity of the topic and its perception as a taboo in Nepalese society also played a factor in reluctance to disclose true information.

CONCLUSION

Though 92.6% of respondents had knowledge about contraception, only 74.93% of them were found practicing, well above the national prevalence rate i.e. 43%.²⁶ Choice of abortion is also on rise as suggested by DHS. No use of family planning after abortion will likely result in another unwanted pregnancy, so counseling for contraception post abortion is essential. Community level programs focusing on availability, method of accurate use and side effects of EC along with available alternatives is a must. Emergency contraception awareness is essential to prevent unwanted pregnancy and must also be discussed during family planning counseling.

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